

## CLAIMS

1. An articulated robot comprising:
  - a plurality of tools at a single unit thereof sharing portions of axes and capable of attaching the tools respectively tips of a plurality of axes connected to the axes independently therefrom, and
    - a control apparatus for subjecting a designated one of the tools to an interpolate control while controlling a position thereof or controlling a position and an attitude thereof and subjecting the tool which is not designated to a uniform pay off control to instruct to an axis angle of a target position.
2. The control apparatus of an articulated robot according to Claim 1, comprising:
  - a member for acquiring information in correspondence with an angle of each axis as the target position;
  - a member for selecting one of the plurality of tools as an object of the interpolate control while controlling the position or controlling the position and the attitude;
  - a member for determining a passing point at which the selected tool is to be moved successively by the interpolate control;
  - a member for determining each axis position for moving a control point of the selected tool to the determined passing

point by an inverse conversion operation; and  
a member for subjecting the axis which is unrelated to  
moving the control point of the selected tool to the uniform  
pay off control to instruct to the axis angle of the target  
position.

3. The control apparatus of an articulated robot according  
to Claim 2, further comprising:

a member for preventing an operation instruction from  
being generated with regard to the axis which is unrelated to  
moving the control point of the selected tool.